

**IN THE CLAIMS**

1. [Cancelled]

2. [Cancelled]

3. (Previously presented) The method of claim 4, wherein the aqueous predominantly anion-containing solution and the aqueous predominantly cation-containing solution are prepared by means of electrolysis of an aqueous solution of a salt.

4. (Previously presented) A method for treating root canals, the method comprising the steps of: electrochemically activating an aqueous solution in an electro-chemical reactor comprising a through-flow, electro-chemical cell having two co-axial electrodes with a co-axial diaphragm between them so as to separate an annular inter-electrode space into cathodic and anodic chambers, wherein the electro-chemically activated solution produces an aqueous predominantly anion-containing

solution and an aqueous predominantly cation-containing solution having microcidal, as well as dispersing and surfactant, properties; and applying the aqueous predominantly anion-containing solution and aqueous predominantly cation-containing solution either concurrently or successively to a root canal.

5. (Previously presented) The method of claim 4 wherein the anion-containing solution is produced from a 10% aqueous NaCl solution, electrolysed to produce separable activated or excited radical cation and radical anion species, the anion-containing solution having a redox potential of up to about +1170 mV.

6. (Previously presented) The method of claim 4 wherein the anion-containing solution has a pH of about 2 to 7 and a redox potential of about +1170 mV.

7. (Previously presented) The method of claim 4 wherein the cation-containing solution has a pH of between 7 and 13 and a redox potential of about -980 mV.

8. (Cancelled)

9. (Previously presented) A method of irrigating root canals, the method comprising the steps of electrochemically activating an aqueous solution in an electro-chemical reactor comprising a through-flow, electro-chemical cell having two co-axial electrodes with a co-axial diaphragm between them so as to separate an annular inter-electrode space into a cathodic and an anodic chamber, such that the electro-chemically activated aqueous solution includes an aqueous predominantly anion-containing and an aqueous predominantly cation-containing solutions having microcidal, as well as dispersing and surfactant properties; and applying the aqueous predominantly anion-containing and aqueous predominantly cation-containing solution either concurrently or successively to a root canal for irrigation purposes.

10. (Currently amended) The method as claimed in claim ~~11~~ 9 further including the steps of first applying cation-containing solution to the root canal, aimed at removing organic film and debris covering the inner walls of the root canal, and thereafter

applying an anion-containing solution to the root canal, aimed at disinfecting the inner walls of the root canal and dentinal tubules.

11. (Cancelled)

12. (Cancelled)